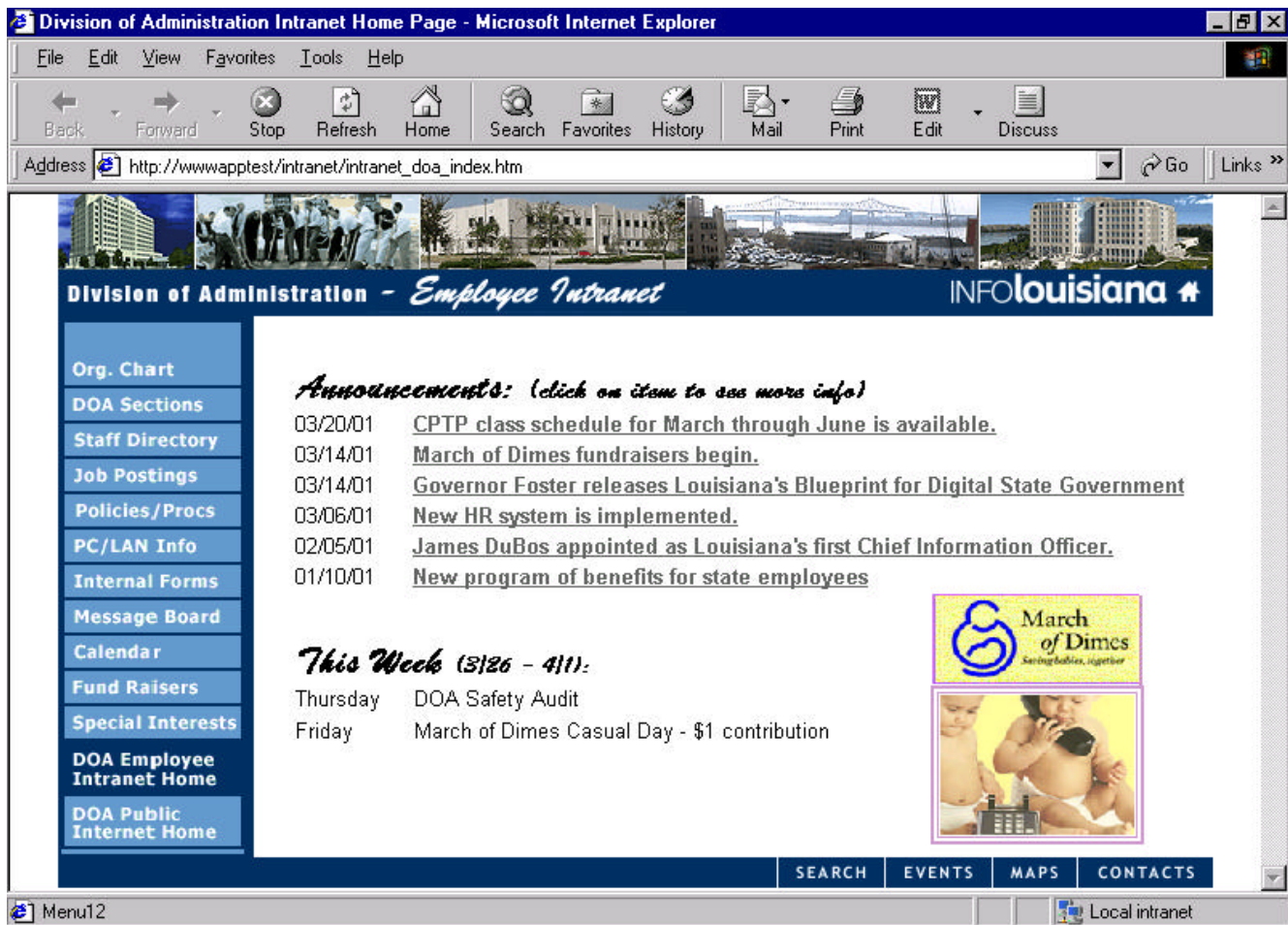


Division of Administration

Basic Web Development Workshop Handout



Revised September 12, 2001

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DOA Web Standards

In order to promote ease of use of the DOA web pages through consistency of design and operation, as well as to encourage adherence to best practices, the following standards have been developed.

Web Design Standards:

1. Content – Information/Navigation Required:

- a. All Pages:
 - 1) Date last updated.
 - 2) Updated By: (webmaster name).
 - 3) Bottom horizontal navigation bar: contacts button, search button.
Note: If additional navigation buttons are used, the required sequence, from left to right is: Maps, Questions, Calendar, Search, Contacts.
 - 4) Left vertical navigation bar: section home page link, DOA home page link.
- b. DOA Section Home Pages:
 - 1) Section name.
 - 2) Director's name.
 - 3) Brief section description (its purpose and where it is within the state government structure).
- c. DOA Section Contacts Pages:
 - 1) Section name.
 - 2) Section address (street and PO box).
 - 3) Section phone number.
 - 4) Section contact email address.
 - 5) Section fax number.
 - 6) Director's name.
 - 7) Email link to section webmaster.

2. Content Volume per Page:

- a. Use headings and subheadings when possible to allow skimming to desired information and facilitate accessibility for the visually impaired.
- b. Avoid very long web pages – break long pages into multiple smaller pages by logical grouping of information.
- c. Avoid pages that are too short or arbitrarily broken up when they could be combined and still fit onto one screen.
- d. Keep content within initial template areas (do not require scrolling to the right).

3. Content Format:

- a. Provide a focal point for each page – avoid too many focal points.
- b. Use strong left alignment for routine text pages.
- c. Limit center alignment to titles or introductory pages.
- d. Keep alignments consistent.

4. Content Layout/Proximity:

- a. Keep related elements grouped closely together (i.e. captions close to pictures, subheadings close to paragraphs).
- b. Create a visual hierarchy of information.
- c. Do not put too much space between elements (i.e. two returns between paragraphs).
- d. Do not put unrelated elements too close together.

5. Content Repetition: Use some method of repetition to tie web pages in a site together.

6. Content Contrast: Use some consistent method of contrast judiciously within a web page for critical elements. (Ensure that it doesn't interrupt the reading process and that it creates a hierarchy of importance.

7. Graphics:

- a. Avoid excessive or meaningless graphics.
- b. Avoid graphics that blink.
- c. Avoid animated pictures.
- d. Avoid counters on pages.

8. Colors:

- a. Use browser safe colors.
- b. Use white backgrounds for the content area.
- c. Coordinate link colors with page colors.

Web Coding Standards :

1. Accessibility:

- a. Code ALT tags for every images.
- b. Use heading tags when possible.
- c. Avoid tables except when necessary for visual organization and placement of content.

2. Font: Use "Arial, Helvetica, sans-serif" font, relative size "2" for normal text.

3. File Naming:

- a. Avoid embedded spaces in file names (recommend replacing with underscores).
- b. Recommend all lower case in file names for ease of use.


Preparing the Website

This section will address the preparations and steps required to build a basic website structure and obtain all the necessary resources for developing web pages. Prior to this point, the following should be completed:

- ♦ Select one of the following basic website file structures:
 1. Single level for all html files, with separate subdirectories only for template and images.
 2. Multi-level with html files grouped in various lower level subdirectories.
- ♦ Define the links required for the left vertical navigation bar.
- ♦ Define the pages required and develop the content for each.
- ♦ Define additional special links required in the content area of specific pages.

Before beginning, create the website root directory under Windows NT Explorer, if necessary. This root may be placed either on your local D: drive, or on any shared drive to which you are mapped, such as your section's G: drive.

Define the Basic Development Site:

1. Open the Dreamweaver software.
2. In the toolbar, click on "Site".
3. Once the option menu appears, move your mouse cursor to "New Site", then click.
4. Once the "Site Definitions for Unnamed Site (a number)" window appears, you must:
 - a. Enter a name for the site in the "Site Name" field - use "xxxtest" where "xxx" is your section acronym for this local/test site, i.e. "osptest" or "osistest".
 - b. Enter the address of your local root directory in the "Local Root Folder" field. You may browse your directories by clicking the  icon to the right of the field.
 - c. Ensure that the "Refresh Local File List Automatically" checkbox is checked.

Associate A Remote Site (wwwtest web server) with the Local Site:

1. Select "Web Server Info" from the category list on the left side of the Site Definition window.
2. Once the "Web Server Info" portion of the Site Definition window appears, click the down arrow for the Server Access drop down list and click on "FTP".
3. Additional entry fields will appear.
 - a. Enter the FTP Host name (isbwwwtest).
 - b. Leave the Host Directory field blank.
 - c. Enter your FTP userid in the Logon field (your section acronym).
 - d. Enter the password associated with your FTP userid for the test server (wwwtest). Make sure that the Save box next to this field is selected.
 - e. Make sure that the 2 lower boxes are NOT selected and click on "OK".
4. Dreamweaver will ask you to "Create A Cache File", click "Don't Create".

5. Now a directory window will appear. You may use it to access all of your local files and add folders as necessary.

Prepare the Basic File Structure:

1. Create a separate folder directly under your root for images.
 - a. Make sure that your site root folder is highlighted.
 - b. Click on “File” in the top menu bar.
 - c. Click on “New Folder” in the drop-down menu.
 - d. A new folder entry called “untitled” will be highlighted in the Dreamweaver Site Definition window Local Folder pane. Type the name of your new folder, in this case, “images”.
2. Create a separate folder directly under your root for templates.
 - a. Make sure that your site root folder is highlighted.
 - b. Click on “File” in the top menu bar.
 - c. Click on “New Folder” in the drop-down menu.
 - d. A new folder entry called “untitled” will be highlighted in the Dreamweaver Site Definition window Local Folder pane. Type the name of your new folder, in this case, “templates”.

Customizing Templates

Obtain Template Components from the Intranet:

Obtain Templates:

1. Open Internet Explorer.
2. Go to the Web Page Components Library on the DOA intranet (http://wwwprod2/intranet/special_web_files.htm) and scroll down to the available templates.
3. **Right** click on the template link.
4. Click on "Save Target As..."
5. In "Save As" window:
 - a. Navigate to your appropriate local subdirectory for templates (/templates - first level down from site root).
 - b. Rename file if desired - but file name extension must remain as .dwt.
 - c. Verify that "Save as type" is "HTML document".
 - d. Click on "Save".
6. Repeat steps 3 through 5d for as many of the templates provided on the intranet for your section as you wish to use.

Obtain customized images (right column next to templates):

1. Continuing on the Web Page Components Library page....
2. **Right** click on the image file name.
3. Click on "Save Target As..."
4. In "Save As" window:
 - a. Navigate to your appropriate local subdirectory for images (/images - first level down from website root).
 - b. Rename file, only if necessary, but make sure file name extensions show as "gif" in the Save As window.
6. Repeat steps 3 through 5c for all of the templates images needed.

Obtain generic navigation buttons:

5. Continuing on the Web Page Components Library page....
6. **Right** click on the image file name.
7. Click on "Save Target As..."
8. In "Save As" window:
 - c. Navigate to your appropriate local subdirectory for images (/images - first level down from website root).
 - d. Rename file, only if necessary, but make sure file name extensions show as "gif" in the Save As window.

7. Repeat steps 3 through 5c for all of the templates images needed.

Obtain Photos for the Top Image Bar from the Intranet:

1. On the Web Page Components Library page, scroll down to the bottom of the page.
2. Click on the link to the top image bar selection page.
3. **Right** click on the desired image file name.
4. Click on "Save Target As...".
5. In "Save As" window:
 - a. Navigate to your appropriate local subdirectory for images (/images - first level down from website root).
 - b. Rename file if desired and make sure file name extensions show as "gif" or "jpg" in the Save As window. (The Save Target As window seems to change the JPEG file extension of the web image file from "jpg" to "jpe" - that should be changed to locate those files easily under Dreamweaver.)
 - c. Click on "Save".

Customizing Templates for Your Section:

The templates initially prepared for the DOA sections and stored on the intranet are very basic, containing only required or standardized formats and navigation buttons. The first time that they are retrieved by each section, they will need to be further customized to the specific requirements of that section. Navigation items defined by each section for their own needs and business environment will need to be added, and images for the top of the page will need to be selected and added to the templates. Once those customizations are performed and the final templates are saved, the DOA webmaster should be notified so that a copy may be migrated back to the intranet for safe storage and future use.

To create additional templates, you may save an existing template as a new file ("save as template") and make changes to that new template.

1. Return to the Dreamweaver Site window (If not still open, access from the top menu bar of any Dreamweaver blank or open web page window: Site, Open Site..., then select your site name and click).
2. Locate the templates folder and click on the "+" to expand the folder and display the list of templates available.
3. Double click on the template name to open. Template will be displayed for editing just as a regular web page would.
4. Make sure that the Dreamweaver Properties window is open. If not, click on "Window" in the top menu bar, and "Properties" in the drop-down menu.
5. Prepare the left vertical navigation bar:
 - a. Count the number of basic links that you have defined for your site. If it is more than the number of "Links" items on the template, create additional slots as follows:
 - 1) Click inside the last "Links" entry.
 - 2) Click on "Modify" in the top menu bar.
 - 3) Click on "Table" in the drop-down menu.

- 4) Click on “Insert Rows or Columns” on the flyout menu.
- 5) Make sure “Rows” is selected. Change the number to however many additional items are needed, and click “OK”. Blank table cells will be inserted in the navigation bar.
- b. Prime the new navigation cells with the standard attributes:
 - 1) Highlight one of the “Links” entries and, keeping your cursor within the highlighted area, right click.
 - 2) Select “Copy” from the flyout menu.
 - 3) Click in one of the blank navigation table cells, right click, and select “Paste”. This will paste “Links” into that cell. The text will have to be changed later, but this action will also copy all attributes (color, text size, etc.) into the blank cell, eliminating some steps later. Repeat the paste action for each new navigation cell.
- c. Highlight each “Links” entry in turn and overwrite it with the text for your own navigation link.
6. Add images to the top of the template:
 - a. Click in the gray area at the top of the page.
 - b. Click on the folder icon next to “Src” on the top line of the Properties window. The “Select Image Source” window will be displayed.
 - c. Navigate to your local website directory, then down to the “images” subdirectory just under your site root.
 - d. Highlight the image bar that you downloaded from the DOA intranet and click “Select”. A bar of photographs should display across the top of your template page.
7. Apply the ALT attribute to each image as follows to comply with accessibility requirements:
 - a. Click on the image to select it.
 - b. Click in “Alt” field on second line of the Properties window and type the text that you wish to display (or be read by a screen reader for the visually impaired). Guidelines:
 - 1) Keep descriptions concise.
 - 2) Place the most meaningful word(s) that will convey the purpose of the image first.
 - a. “Photo of” - For photos placed on the page purely for aesthetics.
 - b. “Link to” - For images placed on the page as links to other pages.
 - c. “xxx of” - For special purpose images that provide additional content, more than simple visual interest, such as a map or floor plan or chart.

Note: Remember to apply the “ALT” attribute to all images, including navigation buttons and title bar items.
8. Click on “File” in the top menu bar and “Save” in the drop-down menu to save the template with your own customizations. (You have already saved this file as a Dreamweaver template – extension .dwt – so you can perform a regular save instead of a “Save as Template”.

Creating Web Pages

Prior to creating web pages, all activities from the prior sections, “Preparing the Website” and “Customizing Templates”, must be completed.

Create a Web Page (HTML file) from a Template:

1. Open the Dreamweaver software.
2. In the toolbar, click on “Site”.
3. On the drop-down menu, move your cursor over “Open Sites...”. A flyout menu will be displayed listing all of your sites.
4. Click on the test site that you created. The Site window will open, showing all files associated with the site in the right window pane.
5. On the top menu bar, click on “File”.
6. On the drop-down menu, click on “New from Template...”. The “Select Template” window will open, displaying all templates associated with the site.
7. Highlight the template you wish to use and click “Select”. A new HTML document will open based on the template you selected. The template portions will be locked, but the editable region is now available for update.
8. **Save your document** by clicking on “File” in the top menu bar, then “Save” from the drop-down menu. Assign a descriptive file name on the “Save As” window, and **be sure that your file is being saved to the proper directory** (your website root in most cases).

Note: It is important to save your file now, before adding content, to ensure that any links or additional images are defined properly by Dreamweaver to the HTML document.

Preparing an HTML Document to Add Content:

1. Make sure the Dreamweaver Properties window is open. If not, click on “Window” in the top menu bar, and “Properties” in the drop-down menu. The Property Inspector palette (“Properties” window) displays and allows you to change properties for whatever page element is currently selected.
2. Open the “Objects” window by clicking on “Window” in the top menu bar, and “Objects” in the drop-down menu. The Object Palette (“Objects” window) contains shortcut icons for many frequently used functions associated with content entry and modification. The default selection, “Common”, should be displayed. If not, click on the down arrow on the right directly under the title bar and select “Common” from the list of object type windows displayed.
3. Click on “Modify” in the top menu bar and select “Page Properties” from the drop-down menu.
4. Enter a good descriptive title to display in the browser window (this is not a file name). Click “Apply” and “OK”
Note: Choosing a good descriptive title for each page is extremely important because the title will be used by search engines on the Internet to locate your page in response to a user’s search request.

Adding Text to an HTML Document:

1. The document’s editable region, established during the creation of the template, is identified by a placeholder. Non-editable regions are highlighted (default color is yellow).
2. The standard font for InfoLouisiana is Arial, so if your text is not displaying with that font, you will need to change it in the “Font” field on the Properties window from “Default Font” to “Arial, Helvetica, sans-serif”. This will need to be done at the start of each paragraph (a new paragraph resets the font to the default), or, after entry of the text, all

the text can be highlighted and the font changed at that time. (Note: You may want to change your default font under Edit>Preferences, Font/Encoding category, proportional font, to “Arial”.)

3. Entering a heading:
 - a. On the Properties window, click on the down arrow to the right of the “Format” field and select a heading. The largest is Heading 1, with sizes decreasing with the larger heading numbers
 - b. Heading text, like any other text, may be changed after entry if necessary by selecting the text and modifying the relative size on the Properties window. This will retain the heading tag with it’s associated heading importance (level) but tune the display.
4. Entering text:
 - a. InfoLouisiana font standard: “Arial, Helvetica, sans-serif”. Standard size: “2”.
Note: The font size on the Properties window is a relative size. Be sure to use these relative sizes and do **NOT** go into the code to hardcode a specific font size (unless there is an overwhelming business reason to do so). This will override the capabilities of most browsers to enlarge or decrease relative text size to meet the needs of individual users.
 - b. Text color: May be changed in the Properties window by clicking on the box with the down arrow that is located to the right of the font size field. Click on the desired color in the color display.
Note: Strictly limit the use of different colored text, applying it only if necessary to special headings or items that must stand out. Different colored text may be interpreted as a link or simply confuse the eye and distract the reader.
 - c. Text alignment: May be changed on the first line of the Properties window.
Note: Use strong left alignment, except when necessary for placement of limited text on a home page or other introductory page. Centered text is difficult to read and should be avoided.
 - d. Line spacing:
 - 1) To create a new line with a blank line between, press Enter.
 - 2) To create a new line without a blank line between, press Shift and Enter simultaneously, or click on the “Insert Line Break” icon in the Objects window.

Formatting Text with Tables:

Dreamweaver’s text formatting (placement) options are somewhat limited. Complex formatting of text, such as the creation of columns is best performed with the use of tables, which may be created with or without borders.

1. Inserting a table:
 - a. Click on the “Insert Table” icon in the Objects window or click “Insert” in the top menu bar, click on “Table”.
 - b. Enter the number of rows and the number of columns.
 - c. Specify the width of the table, in percentage of space available, or in pixels.
 - d. Specify the border value. “0” indicates no border, “1” indicates a single line around each cell (and the table as a whole), and
 - e. Enter cell padding and cell spacing.
 - 1) Cell padding controls the spacing between the cell borders and the text inside the cell (the margins).
 - 2) Cell spacing controls the spacing between cells. If the table has borders, a value of “1” specifies a single line between cells. Higher values specify double lines between cells, with increasing numbers creating wider borders around the table.
2. Adding columns and rows to a table:
 - a. Click on “Modify” on the top menu bar.
 - b. Click on “Table” on the drop-down menu.

- 1) To insert a single row above the current selection (where the cursor is currently placed in the table), click on “Insert Row”.
- 2) To insert a single column to the left of the current selection, click on “Insert Column”.
- 3) To insert multiple rows or columns, or to insert below the current selection, click on “Insert Rows or Columns...”.
3. Aligning text within columns:
 - a. Move cursor over table column until a down arrow appears.
 - b. Click to select column.
 - c. Click on desired alignment on Properties window.
Note: For any column containing a relatively large amount of information (usually, more than 1 word in each column cell), specify left alignment.
4. Changing column sizes:
 - a. Position cursor over column border until it changes to “<-||->”. Holding down the left mouse button, drag the border in the desired direction. OR
 - b. Select column (see above) and, on Properties window, change the value in the “W” (width) field on the third line, to the right of the horizontal spacing field of the column.
5. Aligning text vertically within a table cell:
 - a. Select the column and click on the right arrow next to the “Vert.” Column field on the bottom line of the Properties window.
 - b. Select the desired alignment.
6. Changing the background color of a table:
 - a. Select the table.
 - b. Click on the down arrow next to the “Bg” box on the bottom line of the Properties window.
 - c. Click on the desired color.
7. Changing the border color of a table:
 - a. Select the table.
 - b. Click on the down arrow next to the “Brdr” box on the bottom line of the Properties window.
 - c. Click on the desired color.

Adding Links to the HTML Document:

1. Adding a link to another page:
 - a. Select the text with which the link will be associated.
 - b. Type the file path in the “Link” field, or click on the file folder icon on the second line of the Properties window (next to the link field) and navigate to the file to which the text will link and click on “Select”.
2. Adding a link to another location on the same page.
 - a. Highlight the text at the point to which the link will travel.
 - b. Click on “Insert” in the top menu bar.
 - c. Click on “Insert Named Anchor” in the drop-down menu.
 - d. Enter a name for the anchor.
 - e. Highlight the text that will initiate the link.
 - f. In the Link field of the Properties window, type “#”, immediately followed by the name of the anchor. (i.e. #name).
3. Adding an email link:
 - a. Click on the “Insert E-Mail Link” icon on the Objects window, or click on “Insert” in the top menu bar, then “E-Mail Link” in the drop-down menu.
 - b. In the “Text” field of the “Insert E-Mail Link” window, type the text that will initiate the link.

- c. In the "E-Mail" field, type the address to which the email will be sent.
- d. Click "OK".

Adding Graphics to the HTML Document:

1. Place the cursor where you wish the image to be placed.
2. Click on the "Insert Image" icon of the Objects window, or click on "Insert" in the top menu bar, then "Image" and navigate to the desired image file and click on "Select".
3. To change horizontal positioning of the image on the page, select the image, click on the "Align" field on the top line of the Properties window, and select the desired alignment.
Note: For the most precise placement, images may have to be inserted into table cells.
4. With the image still selected, click on the "Alt" field on the second line of the Properties window and enter the ALT text (see the Modifying Templates section above).

Adding the Last Changed Date to the HTML Document (should already be in any templates created or revised after 9/01):

1. Place the cursor where you wish the date to be placed.
2. Type "Last modified: ".
3. Click on the "Insert Date" icon on the Objects window.
4. Leave "Day Format" as "No Day".
5. In the "Date Format" field, highlight "03/07/1974" as the format.
6. Leave "Time Format" as "No Time".
7. Check the box next to "Update Automatically on Save". The date of each save will be recorded and displayed on the HTML document.

Previewing the HTML Document:

1. Press F12 to view your document in your primary browser. OR
2. Click on "File" in the top menu bar
 - a. Click on "Preview in Browser" on the drop-down menu.
 - b. Choose your browser from the list displayed.
Note: Your primary browser should be set up as Internet Explorer. However, you should download Netscape Navigator also for testing purposes and establish it as a secondary browser. (Additional details in email to DOA webmasters.)

Remember: You don't need to reinvent the wheel with each new web page. If you are creating a new page that is similar in format to one that has already been created, open the earlier page, modify it for the new information, and save it with a new name ("save as").

Modifying templates: If you need to make a change to a template, open the template file, make the necessary change and save it. You will be prompted to update all pages that use the template. Allow Dreamweaver to make the changes. All affected files will need to be migrated to production.

Managing the Website

Dreamweaver provides numerous site management tools to assist you in maintaining a clean and relatively error-free website, migrating local files to web servers, and keeping files in different environments synchronized. This section will address two basic functions: migrating local files to a web server and retrieving fresh copies from a web server for modification.

Migrating a Local Web Page (HTML file) to a Web Server:

To emphasize a point from the first section of this handout, Preparing the Website, it is recommended that you set up multiple sites having the same local subdirectory as the root, but different target web servers for migration purposes. Assigning descriptive names to these separate Dreamweaver sites (i.e. oistest, oisprod) will facilitate selection of the appropriate site for the migrations needed – to the wwwtest server or the wwwprod server.

1. Open the Dreamweaver software.
2. Open the site associated with the server to which you wish to migrate files.
3. Click on the local file you wish to migrate in the right local folder pane of the site window. You can select more than one by simultaneously holding down the Shift key to select contiguous files, or the Control key to select multiple files that are not contiguous.
4. Click on “Connect” at the top of the Site window. Files and subdirectories on your web server site will be displayed in the left remote server pane.
5. Click on “Put” at the top of the Site window. Your files will be copied to the web server designated in the Web Info portion of your site definition.
6. Click on “**Disconnect**”.

Retrieving a Web Page (HTML file) from a Web Server for Modification:

Any web file (html, image, template, etc.) may be brought down from a web server (wwwtest or wwwprod, for example) for local modification and testing. It is strongly recommended that any time a change to an existing web page is initiated, a fresh copy of the production version is retrieved. If an old local copy is used, there is a risk that forgotten experimental changes, not approved for production, may inadvertently be left in the code and migrated to production in error.

1. Open the Dreamweaver software.
2. Open the site associated with the server from which you wish to retrieve files (normally wwwprod).
3. Click on “Connect” at the top of the Site window.
4. Move your cursor to the left pane displaying the components on the server associated with that particular site and click on the file you wish to retrieve. You can select more than one by simultaneously holding down the Shift key to select contiguous files, or the Control key to select multiple files that are not contiguous.
5. Click on “Get” at the top of the Site window. Your files will be copied from the web server designated in the Web Info portion of your site definition to your local site directory.
6. Click on “**Disconnect**”.

Update/Revision Log

- 11/5/01 Section: Preparing the Website/Associate A Remote Site with the Local Site:
- Modified instructions for the Web Server Info section of the Site Definition window to leave the Host Directory name blank.
- Section: Creating Web Pages/Adding the Last Changed Date to the HTML Document:
- Noted that this would already be in any templates set up and stored on the intranet after 9/01.
- Section: Customizing Templates/Obtain Photos for the Top Image Bar:
- Modified for new version of page that displays the image next to the link to download.